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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,877	09/06/2005	Jean-Luc Dubois	034296-024	5557

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BUCHANAN, INGERSOLL & ROONEY PC
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EXAMINER

PUTTLITZ, KARL J

ART UNIT	PAPER NUMBER
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1621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/526,877

Applicant(s)

DUBOIS ET AL.

Examiner

Karl J. Puttlitz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

KARL PUTTLITZ
PATENT EXAMINER

DETAILED ACTION

The rejections under section 112, second paragraph are withdrawn in view of Applicant's amendments removing the inappropriate use of "comprised", including appropriate antecedent basis" and removing "if appropriate" from claim 53.

The prior art rejections are withdrawn since Dubois and Dubois II teach away from conducting the reaction in the presence of oxygen.

The rejection under obviousness-type double patenting is withdrawn over 10/526,879 in view of the Terminal Disclaimer.

The rejection under obviousness-type double patenting is withdrawn over 10/497,210 since the claims of that application require the absence of oxygen.

The following is a new ground of rejection:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/06199 as evidenced by US 6,867,328 to Borgmeier

In view of those embodiments covered by the rejected claims, Borgmeier teaches process for the preparation of acrylic acid by heterogeneously catalyzed gas-phase

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oxidation of propane with molecular oxygen at elevated temperatures over at least one multimetal oxide material of the same formula covered by the rejected claims, see column 1, lines 5-39 and column 3, lines 31-67.

Other process parameters are given in the Examples.

Borgmeier fails to teach the specific propane/molecular oxygen ratio in the claims. However, this ratio would have been well within the motivation of those of ordinary skill based on the feed gas proportions set forth at column 11, lines 52+ of Borgmeier. Therefore, the propane/molecular oxygen ratio in the claims is prima facie obvious based on Borgmeier.

Claims 46-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borgmeier in view of FR 2833005, as evidenced by counterpart U.S. patent Application Publication No. 2005/0054880 to Dubois et al. (Dubois II).

The rejected claims cover those embodiments requiring the presence of a cocatalyst of formula (II), see claim 46. Borgmeier fails to explicitly teach the required cocatalyst. It is for this proposition that the examiner joins Dubois II. In this regard, Dubois II teaches the required cocatalyst at paragraph 0012+, for the preparation of acrylic acid from propane, see paragraph 0002.

Those of ordinary skill would have been motivated to modify Borgmeier to include the required catalyst since Dubois II teaches that these catalyst are effective in the claimed process, and moreover, are effective as co-catalyst with the type of catalyst of formula (I), see paragraph 0059. Therefore, the rejected claims are prima facie obvious

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in view of the combination of Borgmeier and Dubois II since these references teach or suggest the elements of the rejected claims with a reasonable expectation of success.

With regard to the catalyst regeneration steps, those of ordinary skill would have been motivated to modify the disclosure of Borgmeier and Dubois II to include the specific catalyst regeneration steps set forth in the rejected claims since using a series of reactors to run the reaction to completion, and recycling of a catalyst from a regenerator are in the interest of optimizing the process.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl J. Puttlitz whose telephone number is (571) 272-0645. The examiner can normally be reached on Monday to Friday from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page, can be reached at telephone number (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KARL PUTTLITZ
PATENT EXAMINER

2/12/07